IN THE CLAIMS

3. (Currently amended)   A gas bearing system as claimed in ~~any one of the preceding~~ claims_1, characterized in that the content of said cavity (8,9) is between 0.3 mm3 and 4 mm3, preferably between 0.5 mm3 and 2 mm3, more preferably between 0.7 mm3 and 1,5 mm3

4. (Currently amended)   A gas bearing system as claimed in ~~any one of the preceding~~ claims_1, characterized in that said gas duct (6) supplies gas to said cavity (8) through an orifice (7) in the wall of said cavity (8).

5. (Currently amended)   A gas bearing system as claimed in ~~any one of the preceding~~ claims_1, characterized in that the depth of the cavity (8,9) is at least two times, preferably at least four times, more preferably at least six times the diameter of said orifice (7).

6. (Currently amended)   A gas bearing system as claimed in ~~any one of the preceding~~ claims_1, characterized in that said orifice (7) has a diameter between 0.05 mm and 0.3 mm, preferably between 0.07 mm and 0.25 mm, more preferably between 0.1 mm and 0.2 mm.

7. (Currently amended)   A gas bearing system as claimed in ~~any one of the preceding~~ claims_1, characterized in that the dimension of the cavity (8,9) in a direction parallel to said bearing surface (2) is between 0.5 mm and 2.5 mm, preferably between 0.5 mm and 1.5 mm, more preferably between 0.7 mm and 1.2 mm.

8. (Currently amended)   A gas bearing system as claimed in ~~any one of the preceding~~ claims 1, characterized in that the cavity (8,9) has a substantially cylindrical shape, the cylindrical axis being directed substantially perpendicularly to said substantially parallel bearing surfaces (2,3).

9. (Currently amended)   A gas bearing system as claimed in ~~any one of the preceding~~ claims 1, characterized in that the depth of the cavity (8,9) is between 0.3 mm and 2 mm, preferably between 0.5 mm and 1.5 mm, more preferably between 0.7 mm and 1.2 mm.

10. (Currently amended)   A high precision machine comprising a gas bearing system, characterized by a gas bearing system as claimed in ~~any one of the preceding~~ claims 1.

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